



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,404	07/29/2003	Noriyuki Suzuki	00862.023154	6374
5514 7590 06/05/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER CHERY, MARDOCHEE	
			ART UNIT 2188	PAPER NUMBER
			MAIL DATE 06/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/628,404	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Mardochee Chery	<b>Art Unit</b> 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 4-7, 9-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 9-12, 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to applicant's communication filed on March 19, 2007, in response to PTO Office Action mailed on December 18, 2006. The applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.

2. Independent claims 1 and 12 have been amended. Claims 2, 3, and 8 are canceled. Claim 16 has been added. Claims 1, 4-7, 9-12, and 14-16 are now pending.

### ***Response to Arguments***

3. Applicant's arguments filed March 19, 2007 have been fully considered but they are not persuasive.

Applicants argue on pages 8-9 of the remarks that Yamamoto and Uchida are not seen to disclose or suggest at least the features of "judging, by a storage unit, whether or not a recording operation in the storage unit is complete, and outputting, from the storage unit to an information processing apparatus, an eject permission signal for ejecting the storage unit by ejecting means if it is judged that the recording operation in the storage unit is complete".

Examiner respectfully disagrees and would like to point out that, as already noted by applicants, in Yamamoto, it is "a signal indicating an instruction for or permission of ejection of a storage medium that is given

from the system side” but not the mechanism or means of determining whether the recording operation in the storage unit is complete. Applicants argue as though “the signal indicating an instruction for or permission of ejection of a storage medium that is given from the system side” in Yamamoto constitutes the Judging means of the claimed invention. However, such is not the case. Rather, what determines whether or not the recording operation is complete in one embodiment is “a cache storage that is controlled in such a manner that it is also held in the storage medium, it is constructed so that when the indication of ejection of the storage medium is given from a user to the memory device, a write processing for the storage medium is performed in the case where information to be recorded in the storage medium exists in the cache storage”. The judging of whether the recording operation is complete depends on whether information to be recorded in the storage medium exists in the cache. It is worth mentioning that “the instruction for or the permission of ejection of the storage medium given from the system to the memory device” occurs after “the write processing is completed”. See Yamamoto, Abstract, pars. 0017, 0018.

4. Applicants’ amendment to independent claims 1 and 12 do not remove the references from reading upon the claims. In view of the foregoing, the rejection of

claims 1, 4-7, 9-12, and 14-16 is indeed maintained with changes addressing the latest amendment.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 4-7, 9-12, and 14-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Particularly, claims 1, 4-7, 9-12, and 14-16 are rejected under 35 USC 112 first paragraph as containing new matter. Claim 1 recite the limitations "judging whether or not a recording operation is complete" and "wherein said judging means is arranged inside the storage unit". However, on page 3, the specification simply provides for "allowing eject only when no operation (particularly write operation) is done" and on page 1 "an eject mechanism must be arranged outside to eject it [the storage medium]". Claim 12 also recites "judging whether or not a recording operation is complete". Thus, there is no support provided in the original disclosure for these limitations.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-7, 9-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto (2002/0032839) in view of Uchida (2004/0037174).

As per claim 1, Yamamoto discloses a storage unit which is detachable from an information processing apparatus, and has a storage medium for storing data from the information processing apparatus [Figs. 2, 15; paragraph 12, lines 1-3, paragraphs 13 and 17-18] comprising: having ejecting means for ejecting the storage unit [Fig. 15; par. 17]; output means for externally outputting an eject permission signal in accordance with input of the eject instruction [par. 11]; judging means for judging whether or not a recording operation in the storage unit is complete wherein said judging means is arranged inside the storage unit [Abstract; pars. 0017, 0018].

However, Yamamoto does not explicitly teach a controller for controlling storage of data into the storage medium; receiving means for receiving an eject instruction of ejecting the storage unit from the information apparatus; and output means for externally outputting an eject permission signal to the information processing apparatus

for ejecting the storage unit by said ejecting means if said judging means judges that the storage unit is in the ejectable as recited in the claim.

Uchida discloses a controller for controlling storage of data into the storage medium [Fig. 1; controller 20]; receiving means for receiving an eject instruction of ejecting the storage unit from the information apparatus [Fig. 1; eject instruction section 34]; and output means for externally outputting an eject permission signal to the information apparatus for ejecting the storage unit by said ejecting means if said judging means judges that the storage unit is in the ejectable state [Fig. 6; Abstract; pars. 8-11] to provide a disk drive device wherein removal of the disk drive by persons other than the authorized user can be positively prevented (par. 6).

Since the technology for implementing a storage unit with a controller, means for receiving an eject instruction, output means for outputting an eject permission signal was well known as evidenced by Uchida, an artisan would have been motivated to implement this feature in the system of Yamamoto to provide a disk drive device wherein removal of the disk drive by persons other than the authorized user can be positively prevented. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to modify the system Yamamoto to include a storage unit with a controller, means for receiving an eject instruction, output means for outputting an eject permission signal since this would have provided a disk drive device wherein removal of the disk drive by persons other than the authorized user can be positively prevented (par. 6) as taught by Uchida.

Art Unit: 2188

wherein removal of the disk drive by persons other than the authorized user can be positively prevented (par. 6) as taught by Uchida.

As per claim 4, Yamamoto discloses output means uses an extra signal line [par.128].

As per claim 5, Yamamoto discloses input means receiving means receives an eject command as the eject instruction [par.11].

As per claim 6, Yamamoto discloses receiving means receives a status of an operation switch as the eject instruction via an extra signal line [par.128].

As per claim 7, Yamamoto discloses the receiving means further comprises switch receiving means for receiving a status of an operation switch, and notification means for notifying the information processing apparatus of an operation status of the operation switch on the basis of the status of the operation switch that is received by said switch receiving means [pars.124 and 127].

As per claim 9, Yamamoto discloses the operation switch is arranged in the storage unit [Fig.17].

As per claim 10, Yamamoto discloses providing means for providing a user



interface [par. 8]; issuing means for issuing eject instruction to the storage unit in accordance with user operation to the user interface [par.8]; and eject means for ejecting the storage unit on the basis of an eject permission signal which is output from the storage unit in accordance with the eject instruction [par. 11].

As per claim 11, Yamamoto discloses monitoring means for inquiring of the storage unit as to a status of an operation switch, and monitoring a status signal representing the status of the operation switch [pars. 124 and 127]; issuing means for issuing eject instruction to the storage unit in accordance with user operation to a user interface provided by software or the status signal [par. 127]; and eject means for ejecting the storage unit on the basis of an eject permission signal which is output from the storage unit in accordance with the eject instruction [par. 127].

As per claim 12, the rationale in the rejection of claim 1 is herein incorporated. Yamamoto further discloses an receiving step of receiving eject instruction to the storage unit in accordance with user operation to the user interface [par. 8]; and an eject step of causing the information processing apparatus to eject the storage unit on the basis of the eject permission signal [par.11].

Uchida further discloses an output step of causing the storage unit to output an eject permission signal to the information processing apparatus in accordance with the eject instruction after completion of shifting the storage unit to the ejectable state in the state shift step [Fig. 6].

As per claim 14, the rationale in the rejection of claim 1 is herein incorporated.

As per claim 15, Yamamoto discloses the apparatus further comprises an eject designation switch, and said transmission means transmits the eject instruction to the storage unit in accordance with operation on said eject designation switch [pars. 124 and 127].

As per claim 16, Yamamoto discloses the receiving means, after reception of the eject instruction, ignores a subsequent ejection instruction [0127].

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. When responding to the office action, Applicant is advised to clearly point out the patentable novelty that he or she thinks the claims present in view of the state of the art disclosed by references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111(c).

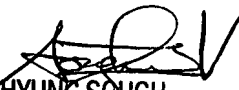
11. When responding to the Office action, Applicant is advised to clearly point out where support, with reference to page, line numbers, and figures, is found for any amendment made to the claims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mardochee Chery whose telephone number is (571) 272-4246. The examiner can normally be reached on 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 17, 2007

  
HYUNG SOUGH  
SUPERVISORY DATE  
5-29-07

  
Mardochee Chery  
Examiner  
AU: 2188